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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/369,031	08/04/1999	LEX S. OLORENSHAW	3188.01/1144	6238

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EXAMINER

KNEPPER, DAVID D

ART UNIT PAPER NUMBER

2654

DATE MAILED: 10/03/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/369,031

Applicant(s)

OLORENSHAW ET AL.

Examiner

David D. Knepper

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 5 November 1999 (IDS, #2).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 September 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

1. Applicant's correspondence filed on 5 November 1999 (IDS, #2) and 28 November 2000 (#3) has been received and considered. Claims 1-50 are pending.

Claims

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-50 are rejected under 35 U.S.C. § 103 as being unpatentable over Kao (6,316,712) in view of Gillick (5,715,367).

“Speech processing” is taught by Kao’s phonetic modeling using acoustic decision tree, title:

“speech data generated from one or more speech sources” (English has about 40 to 50 phones . . . phonetic models can be clustered to not just reduce the number of models but also increase the training robustness, co. 1, lines 8-32);

“an enhanced phone set” (his few examples in col. 2, lines 27-40);

“transcription generated by a transcription process that selects appropriate phones

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from said enhanced phone set to represent said speech data” (suggested by his use of symbols in col. 2, lines 30-40 – see unique transcription symbols used by Gillick in column 28-29).

It is noted that Kao does not explicitly use the term “transcription”. However, he teaches that his models are used to recognize speech and this requires using the models to compare input speech and transcribe or otherwise match element by element. Gillick shows some transcription symbols in columns 28-29. It would have been obvious for a person having ordinary skill in the pertinent art, at the time the invention was made, that “transcription” as claimed is obvious to affect recognition because this is the way linguists have prepared speech models such as those used by Kao and Gillick for speech recognition.

Claim 2: Using the phone dataset that includes said speech data is taught by the training and mapping functions of figure 3.

Claim 3: Use in a speech recognizer is the purpose of the models.

Claim 4-7: Phonetic dictionary is taught with the use of various phones used to recognize speech (see column 3). Use of the TIMIT database is taught by Kao in col. 2, lines 49-67.

Claims 8, 20: These are obvious representations of phones. Most are taught by Kao in col. 2. The transcription symbols used by Gillick include R-coloring in col. 9, line 10-11. R-deletion is obvious in view of Gillick’s inclusion of various “R” sound contexts.

Claims 9-19: The use of various symbols as transcription tools are obvious in view of the variety of text symbols used by Gillick. The applicant fails to teach any new, unobvious phonetic representation of speech. Choosing a particular character to represent old and well known representations of phone models fails to teach any unexpected result.

Claims 21-50 are rejected under similar arguments as presented above.

Prior Art

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Garber (6,408,270), Sabourin (6,073,099) and Kaye (5,623,609) is cited to show examples of other phonetic models used for speech recognition.

5. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

TC2600 Fax Center
(703) 872-9314

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David D. Knepper whose telephone number is (703) 305-9644.

The examiner can normally be reached on Monday-Thursday from 07:30 a.m.-6:00 p.m.

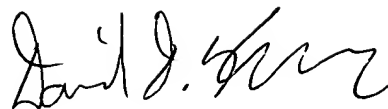
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold, can be reached on (703) 305-4379.

Any inquiry of a general nature or relating to the status of this application should be directed to customer service whose telephone number is (703) 306-0377.

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A handwritten signature in black ink, appearing to read "David D. Knepper". The signature is fluid and cursive, with the first name "David" and last name "Knepper" clearly distinguishable.

David D. Knepper
Primary Examiner
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October 1, 2002